



**SECRET**S-E-C-R-E-T

50X1-HUM

The modernized truck has a 1025-steel frame, which is not heat-treated. The truck's all-wooden cab has been replaced by a wooden cab with metal covering. Eventually the cab will be all metal. The platform has been strengthened, and front and rear springs improved. In a test run, a Ural ZIS made an average speed of 28 kilometers per hour over third and fourth-class roads, while a ZIS-5 was limited to 20 kilometers per hour by its springs.

The Ural Automobile Plant is modernizing the ZIS-5 truck by gradually replacing old units with new ones. At present, trucks are leaving the conveyor with many new units such as hydraulic brakes, stronger rear-axle-reduction gears, and folding-spare-wheel holders. -- S. A. Kurov, Ural Automobile Plant imeni Stalin

**DEFECTIVE FILTERS CAUSE FUEL-SYSTEM WEAR -- Moscow, Mashino-Traktornaya Stantsiya, Dec 50**

This year, in Krasnodarsk, it was noted that the fuel systems of S-30 and DT-54 tractors wore out rapidly after 400-600 hours of operation. A control test by the Armavir Experimental Station VIM (All-Union Institute for the Mechanization of Agriculture) showed that this rapid wear resulted from improper assembly at the plant, which rendered the filter elements of the fuel filters inoperative, and from failure to check correctness of assembly in the tractor brigades.

On most of the tractors inspected, the filter cores protruded above the plate after being assembled, so that when the cover plate was attached, it pressed the filter element down and formed a gap 3-5 millimeters wide between the plate and the filter. The fuel flowed through this gap instead of through the filter element, rendering the filter useless.

**REPLACE BABBITT BEARINGS WITH ROLLER BEARINGS -- Moscow, Mashino-Traktornaya Stantsiya, Dec 50**

The A-22 one-cylinder, two-cycle petroleum motor, used on most kolkhozes and MTS, is so designed that the main bearings cannot be adjusted. The babbitt-lined bearings and the shaft collar wear down after a short time and a gap is formed, lowering the compression and, consequently, the power of the engine. The main crankshaft journals can be reground only three times. A significant shortcoming of the bearings is that very scarce babbitt is needed for them.

Any MTS workshop with a DIP lathe can replace the babbitt-lined main bearings of this motor with ball or roller bearings. Such converted motors were completely serviceable after 7 months of operation. Installation of ball or roller bearings increased the motor's power 2-3 horsepower and increased the life of the crankshaft ten times.

**BUILD COLD-BURNISHING DEVICE -- Moscow, Mashino-Traktornaya Stantsiya, Oct 50**

The BN babbitt compound used for tractor bearings shrinks considerably after lining because of its toughness, which makes it necessary to adjust the bearings often, especially in the beginning of the tractor's use. The lack of stands for cold burnishing in a number of MTS limits the repair shops to scraping the bearings and then running them in on an assembled tractor. The UyuK Sovkhoz, Tuvinskaya Autonomous Oblast, has built a device, simple to construct and convenient to operate, which burnishes bearings lined with BN babbitt compound in 30 minutes.

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USE BRONZE ALLOYS FOR VACUUM CASTING -- Moscow, Avtomobil'naya i Traktornaya Promyshlennost', Jan 51

OTs-10-2, OTs-6-6-3, and OTs-5-5-5-bronze alloys, and AZh-9-4-aluminum-ferrous bronze are being used for the vacuum-suction casting of small rods and bushings.

CARBURETOR PLANT SETS NEW GOALS -- Moscow, Moskovskaya Pravda, 27 Feb 51

The Moscow Carburetor Plant increased commercial production more than 4.5 times during the postwar Five-Year Plan and more than tripled the effectiveness with which basic resources of the enterprise are utilized. Even though the production program for the first quarter is approximately 14 percent greater than for the corresponding period last year, while the personnel remains the same, the plant has decided to complete the quarter plan 12 days ahead of time, by 18 March. The plant will organize the mass output of 100 different bicycle parts, an entirely new product for this plant, by the time the Ninth City Party Conference opens.

The plant will organize a division for electric polishing of parts, will institute anode-mechanical sharpening and electrolytic hardening of tools, will adopt electric-spark processing in production, particularly in hardening tools and dies, and will use high-frequency current more extensively.

INCREASE MOTORCYCLE OUTPUT -- Moscow, Moskovskaya Pravda, 10 Mar 51

The Moscow Motorcycle Plant has increased the output and lowered the production cost of motorcycles. For 2 months it has produced 21 percent more machines than in the corresponding period last year. More than half the shops have gone over to collective Stakhanovite labor, in which every worker exceeds his assignment.

CITE 1950 PRODUCTION FIGURES FOR UKRAINE -- Kiev, Pravda Ukrainy, 28 Jan 51

The Statistical Administration Ukrainian SSR announced the following increases in 1950 production as compared to 1949: bicycles, 129 percent; and motorcycles, 171 percent.

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